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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,470	04/06/2001	Geoffrey G. Hammett	A-6288	6157

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SCIENTIFIC-ATLANTA, INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
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LAWRENCEVILLE, GA 30044

EXAMINER
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LONSBERRY, HUNTER B

ART UNIT	PAPER NUMBER
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2623

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/25/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/25/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail@sciatl.com

**Office Action Summary**

Application No.

09/827,470

Applicant(s)

HAMMETT ET AL.

Examiner

Hunter B. Lonsberry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-24, 26, 28-31 and 33-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-24, 26, 28-31 and 33-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 - 3, 5 - 10, 14 - 22, 26, 28 - 31, 33, and 36 - 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,088,722 to Herz in view of U.S. Patent Application Publication 2002/0073425 to Arai and U.S. Patent 6,192,340 to Abecassis.

Regarding Claim 1, Herz discloses a media system (See Figure 4) comprising a memory to store media information characterizing media (Col. 10, Lines 15-21, Col. 11, Lines 60-67, Col. 42, Lines 2-11 and Col. 46, Lines 53-62) and a processor (See Figure 9, 906) configured by the memory to provide a user interface (Col. 47, Lines 9-13) to enable a user to define a media presentation from the media information (Col. 9, Lines 42-63, Col. 10, Lines 5-21, Col. 12,

Lines 17-40). The processor calculates an agreement matrix based on the characterization data and the user profile to create a virtual channel designed to produce the greatest total customer satisfaction (Col. 23, Lines 40-66). The virtual channel comprises a set of programs (Col. 24, Lines 24-26) for different time slots (Col. 22, Lines 60-63). This reads on the processor further being configured by the memory to continually and automatically select from among a plurality of the media streams containing the media to present the user defined media presentation. While it is implicit that the virtual channel is a continuous stream of programming selected from various channels, Herz does not disclose automatically segueing media stream changes and the user interface being further configured to enable the user to define a presentation order containing a plurality of media from at least one of the plurality of media streams.

Arai discloses a system for searching program information to select programs fulfilling specific criteria (Page 5, Paragraphs 102 and 107) to create a virtual channel (See Figures 3-4 and Paragraph 109), wherein the program guide immediately tunes to the selected programming (Pages 5-6, Paragraph 110). This reads on the claimed automatically segueing media stream changes. Arai is evidence that one of ordinary skill in the art would appreciate the ability to form a contiguous media presentation from a plurality of disparate source streams based on user-specified search criteria.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Herz with the automatic segue

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of Arai to provide seamless stream switching to the user such that they may remain on their selected virtual channel and receive best-fit programming constantly without any required interaction.

The combination of Herz in view of Arai discloses displaying programming on channels in advance of time corresponding to the media presentation (see Arai fig. 9) but fails to disclose the claimed wherein the user interface is configured to enable the user to prioritize in advance of a time corresponding to the media presentation the presentation order of the media corresponding to the media presentation and the order of the media instances being based upon the ranked categories and ranking the information within the ranked categories.

Abecassis discloses a radio on demand system as shown in figures 7-8 in which a user transmits to an information provider their preferences (column 13, lines 23-55), the preferences include musical categories, personal categories such mood, tempo, occasion etc, and may use Boolean expressions, as well as a variety of algorithms to order the playlist (column 15, lines 14-column 16, line 20), the user may establish preferences per category/subcategory and may determine the interval in which the category is played (column 17, lines 6-48), thereby ranking both the categories and the content within the category. The music may originate from a variety of sources and are integrated together for a user (column 4, line 66-column 5, line 20, column 6, lines 10-56, column 14, lines 60-65, column 16, lines 8-19) and may be retrieved in advance of the time of playing or may be downloaded in real time and need not be constrained to the contents of the user's own audio library.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Herz and Arai, to utilize the preferences with respect to categories and sub categories, the interval settings, and multiple content sources as taught by Abecassis for the advantages of enabling the user to listen to the content exactly how they want, and allowing the user to not be constrained to only the content in their own library (column 16, lines 7-30).

Regarding Claim 2, Herz in view of Arai disclose a system as stated above in Claim 1. Herz further discloses that the processor and memory are resident in a media services client device (set top terminal, See Figure 9) and the terminal is operable to calculate the agreement matrix and define the virtual channel (Col. 26, Lines 5-15).

Regarding Claim 3, Herz in view of Arai disclose a system as stated above in Claim 1. Herz further discloses that the head end is operable to perform the calculations and definition of programming (Col. 26, Lines 16-17). This reads on the claimed processor and memory being resident in a media services server device.

Regarding Claim 5. Herz in view of Arai disclose a system as stated above in Claim 1. Herz further discloses that the media corresponds to broadcast

music (Col. 9, Line 38 and Col. 52, Lines 3-39).

Regarding Claim 6, Herz in view of Arai disclose a system as stated above in Claim 5. Herz further discloses that the media information is selected from a genre, artist and date of composition (Col. 52, Lines 6-10).

Regarding Claim 7, Herz in view of Arai disclose a system as stated above in Claim 1. Herz further discloses that the user interface comprises an electronic program guide as stated above, wherein a user is operable to define program criteria as stated above, answer questionnaires (Col. 12, Lines 26-28) and modify profile data (Col. 47, Lines 27-30). It is implicit that there be a plurality of screen displays in order to accomplish each of these tasks.

Regarding Claim 8, Herz in view of Arai disclose a system as stated above in Claim 7. The EPG displays a list of available selections and virtual channels that are based on a user's profile (Col. 47, Lines 9-18). This reads on the claimed screen display comprising a displayed list of media information. Regarding Claim 9, Herz in view of Arai disclose a system as stated above in Claim 1. Herz further discloses that the media may be categorized by information categories such as genre, director, actor, and rating (Col. 11, Lines 60-67).

Regarding Claim 10, Herz in view of Arai disclose a system as stated

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above in Claim 9. As stated above, the EPG displays information pertaining to the virtual channel, which reflects the user's profile and selected characteristics. This reads on the claimed user interface being configured to display the media information (EPG) corresponding to at least one of the media information categories.

Regarding Claim 14, Herz in view of Arai disclose a system as stated above in Claim 1. Herz further discloses that the EPG is operable to display the virtual channel selections as stated above. This reads on the claimed user interface being configured to display the media information defined by the user.

Regarding Claim 15, Herz in view of Arai disclose a system as stated above in Claim 14. Herz further discloses that a user may use the EPG to select the virtual channel for display (Col. 47, Lines 18-24). Because the virtual channel is a result of prior user-selected characteristic information, this reads on the claimed user interface being configured to enable the user to select a prior defined media presentation.

Regarding Claim f6, Herz in view of Arai disclose a system as stated above in Claim 14. Herz further discloses that a user may modify their profile (Col. 47, Lines 27-30). This reads on the claimed adding or deleting media information from at least one of the 'user defined categories.

Regarding Claim 17, Herz in view of Arai disclose a system as stated



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above in Claim 1. Herz further discloses that the user is operable to block certain programming (Col. 47, Lines 44-60). This reads on the claimed exclusion of media.

Regarding Claim 18, Herz in view of Arai disclose a system as stated above in Claim 1. Herz further discloses that the user interface is configured to enable the user to enter input from a remote control device (Col. 47, Lines 18-24).

Regarding Claim 19, Herz in view of Arai disclose a system as stated above in Claim 1. Herz further discloses that the set top terminal receives programming from a distribution system at a cable head end (See Figure 4). This reads on the claimed processor being configured by the memory to receive the media information from a media services server device (distribution system).

Regarding Claim 20, Herz in view of Arai discloses: a system as stated above in Claim 1. Arai further discloses that the media information includes timing data that define start and end times of the media among the plurality of streams (See Figure 3).

Regarding Claim 21, Herz in view of Arai disclose a system as stated above in Claim 1. Arai further discloses that the processor is configured by the memory to search for media in progress (Page 5, Paragraph 1 10) and upcoming

streams (See Figure 4) that correspond to media information defined by the user among a plurality of streams as stated above.

Regarding Claim 22, Herz in view of Arai disclose a system as stated above in Claim 1. As stated above, Arai discloses that the system is operable to automatically and continuously segue from media in progress to upcoming media corresponding to the user-defined media among a plurality of streams.

Regarding Claim 26, Herz discloses a media system for providing a user-defined media presentation (See Figure 4). Herz further discloses a user interface to receive profile information (user definition of media information) wherein the media information characterizes the media for a media presentation (see col 11 lines 60 - 67, col 12 lines 7 - 23, col 25 lines 55 - 57, col 47 lines 25 - 30). Herz clearly discloses a screen for user profiles, a screen for questionnaires and a screen for an EPG and thus discloses the plurality of screen displays (col 12 lines 26-28 and col 47 lines 27-30). It is noted that user can view the manually modify his or her customer profiles while they are displayed on the screen and/or select one or more categories to which a selected profile is relevant (see col 47 lines 25 - 30). The customer profiles (see col 21 ' lines 26 - 35) define the user defined media presentation with increasing detail as the user can modify the details of the presentation with respect the presentations romance, high-tech and violence rating. It is noted that a user can

providing user input on the plurality of screen displays including the EPG display screen, the customer profile screen and questionnaire screen. Herz further discloses a memory to store media information characterizing media (Col. 10, Lines 15-21, Col. 11, Lines 60-67, Col. 42, Lines 2-11 and Col. 46, Lines 53-62) and a processor (See Figure 9, 906) configured by the memory to provide a user interface (Col. 47, Lines 9-13) to enable a user to define a media presentation from the media information (Col. 9, Lines 42-63, Col. 10, Lines 5-21, Col. 12, Lines 17-40). The processor calculates an agreement matrix based on the characterization data and the user profile to create a virtual channel designed to produce the greatest total customer satisfaction (Col. 23, Lines 40-66). The virtual channel comprises a set of programs (Col. 24, Lines 24-26) for different time slots (Col. 22, Lines 60-63). This reads on the claimed "searching for the media corresponding to the user-defined media information among a plurality of media streams" as the incoming streams are searched according the customer profiles and content profiles for providing programming on the virtual channel. While it is implicit that the virtual channel is a continuous stream of programming selected from various channels, Herz does not disclose automatically segueing media stream changes and a plurality of media from at least one of the plurality of media streams.

Arai discloses a system for searching program information to select programs fulfilling specific criteria (Page 5, Paragraphs 102 and 107) to create a virtual channel (See Figures 3-4 and Paragraph 109), wherein the program guide

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immediately tunes to the selected programming (Pages 5-6, Paragraph 1 10).

This reads on the claimed automatically segueing media stream changes. Arai is evidence that one of ordinary skill in the art would appreciate the ability to form a contiguous media presentation from a plurality of disparate source streams based on user-specified search criteria. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Herz with the automatic segue of Arai to provide seamless stream switching to the user such that they may remain on their selected virtual channel and receive best-fit programming constantly without any required interaction.

The combination of Herz in view of Arai discloses displaying programming on channels in advance of time corresponding to the media presentation (see Arai fig. 9) but fails to disclose the claimed wherein the user interface is configured to enable the user to prioritize in advance of a time corresponding to the media presentation the presentation order of the media corresponding to the media presentation and the order of the media instances being based upon the ranked categories and ranking the information within the ranked categories.

Abecassis discloses a radio on demand system as shown in figures 7-8 in which a user transmits to an information provider their preferences (column 13, lines 23-55), the preferences include musical categories, personal categories such mood, tempo, occasion etc, and may use Boolean expressions, as well as a variety of algorithms to order the playlist (column 15, lines 14-column 16, line 20), the user may establish preferences per category/subcategory and may determine the interval in which the

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category is played (column 17, lines 6-48), thereby ranking both the categories and the content within the category. The music may originate from a variety of sources and are integrated together for a user (column 4, line 66-column 5, line 20, column 6, lines 10-56, column 14, lines 60-65, column 16, lines 8-19) and may be retrieved in advance of the time of playing or may be downloaded in real time and need not be constrained to the contents of the user's own audio library.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combination of Herz and Arai, to utilize the preferences with respect to categories and sub categories, the interval settings, and multiple content sources as taught by Abecassis for the advantages of enabling the user to listen to the content exactly how they want, and allowing the user to not be constrained to only the content in their own library (column 16, lines 7-30).

Regarding Claim 28, Herz in view of Arai disclose a system as stated above in Claim 27. Herz further discloses that the user interface is operable to allow the user to rate various characteristics of the media such as genre, director, actor and rating as stated above. This reads on the claimed presenting a predefined list of media information categories on the screen display.

Regarding Claims 29-31, see Claims 15-17 above, respectively.

Regarding Claim 33, see Claim 21 above.

Regarding Claim 36. see Claim 24 above.

Regarding Claim 37, see Claim 18 above.

Regarding Claim 38, Herz in view of Arai disclose a system as stated above in Claim 26. Herz further discloses that the system identifies the media from content profiles and EPG data (Col. 26, Lines 5-8). The information is created and stored (Col. 25, Lines 45-47) prior to transmission to the user's set top terminal. This reads on the claimed identifying the media from media information generated by the media services server device.

3. Claims 11-13 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al. in view Arai et al. U.S. Patent 6,192,340 to Abecassis and further in view of U.S. Patent No. 6,216,264 to Maze et al.

Regarding Claims 11-13, Herz in view of Arai and Abecassis disclose a system as stated above in Claim 1. Herz further discloses that a user may specify a program by name (Col. 12, Lines 17-21). What is not disclosed, however, is that the user interface is configured to enable the user to enter input and search media information using alphanumeric characters corresponding to media information or to display the resulting search information. Maze discloses a television system wherein users are operable to enter search criteria alphanumerically (Col. 2, Lines 29-33 and Col. 5, Lines 17-25) in order to quickly locate programs of

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interest (See Figures 1a - 1c, 2 and 6) and display the results. This reads on the claimed user interface being configured to enable the user to enter input and search media information using alphanumeric characters corresponding to media information. This further reads on the claimed interface being configured to display the media information resulting from the search. Maze is evidence that one of ordinary skill in the art would have appreciated the ability to perform an EPG search alphanumerically. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Herz in view of Arai and Abecassis with the alphanumeric searching of Maze in order to allow a user to quickly locate a program of interest by name.

Regarding Claim 34, see Claim 12 above. Maze further shows searching through the EPG that includes programs in-progress and programs that are upcoming (See Figure 1b).

Regarding Claim 35, see Claim 24 above.

4. Claim-23 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,088,722 to Herz et al. in view of U.S. Patent Application Publication 2002/0073425 to Arai et al, U.S. Patent 6,441,832 to Tao and U.S. Patent 6,192,340 to

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Abecassis, in view, as applied to claim 1 above, and further in view of Tanaka et al (US 4,393,502).

Regarding claim 23, the combination of Herz, Arai, Tao and Abecassis fails to disclose wherein the processor is configured by the memory to cross fade the upcoming media defined by the user with the in-progress defined by the user.

In analogous art, Tanaka teaches cross fading audio signals results in audio signals having substantially imperceptible interference or discontinuities (see col12 lines 17 - 22).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Herz, Arai, and Abecassis to include the claimed limitation for the benefit of avoiding imperceptible interference or discontinuities when switching from the upcoming media defined by the user with the in-progress defined by the User.

5. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,088,722 to Herz et al. in view of U.S. Patent Application Publication 2002/0073425 to Arai et al and U.S. Patent 6,192,340 to Abecassis , as applied to claim 1 above, and further in view of Inoue et al (US 5,729,280).

Regarding Claim 24, the combination of Herz, Arai, and Abecassis fails to



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that the Processor is configured by the memory to buffer at least part of the media in memory to enable the media to be presented in its entirety. In an analogous art, Inoue teaches pre-storing the first segment of a desired video program in a buffer memory provides immediate reproduction of the program while the remaining programs segments are retrieved to seamlessly present the entire video program to a user (see col 7 lines 35 - 45).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Herz, Arai, and Abecassis to include the claimed buffering at least a pad of the media corresponding to the user defined media presentation for the benefit of immediately producing and seamlessly presenting the media to a user in its entirety.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HBL

  
Hunter B. Lonsberry  
Patent Examiner  
Art Unit 2623